Chapter 10

Health and Well-Being

When it comes to what gives rise to the good life and a global sense of well-being, place matters.

(Markus, Plaut, & Lackan)[1]

Our region recently embarked on a path towards improving the quality of life for all through the Bold Goals initiative (www.uwgc.org). Along with the leadership of United Way of Greater Cincinnati, more than 225 organizations have endorsed this truly regional effort. The first nine chapters of this report illuminate the rationale behind the need for Bold Goals to be established for our region in the areas of Education and Income. These chapters make clear the challenges our neighborhoods face as their citizens struggle to meet education pathway benchmarks and struggle to obtain the skills needed to compete for higher wage jobs. Bold Goals were also set in a third area - Health. While not always readily recognized, Education, Income and Health are closely related. Health cuts across Education and Income – essentially extending throughout the entire lifespan. Good health helps to ensure children are prepared for kindergarten and that they succeed during their school years. Later, health can play a key role in success in post-high school education – regardless of whether one pursues additional non-degree workforce training or a post-secondary degree. Finally, poor health can provide a variety of barriers to keeping families from being financially stable. This chapter discusses the relevance of health at the neighborhood level, and discusses the broad array of factors that can lead to challenges for our neighborhoods and their residents in the area of health.

Neighborhoods have emerged as a potentially relevant concept for understanding the health and well-being of individuals. Whether people are healthy or not is determined not only by the person's genetic endowment, biological make-up, and life course choices and behaviors, but also by the conditions under which the person lives.[2] A neighborhood is typically thought of as a specific geographic area, commonly identified by a proxy indicator such as census tract or other spatial or bureaucratic measure, with distinguishing characteristics related to its physical and social environments. A neighborhood's physical environment refers not only to its natural setting, but also to its human-made built surroundings in terms of housing quality, land use and zoning, street designs and transportation systems, businesses and shopping opportunities, educational and health care services, recreational and green spaces, and other features of urban design and public spaces. In addition, there are the exposures associated with those surroundings in terms of air and water quality, cleanliness, light and noise, proximity to hazardous substances, and other environmental conditions. The social environment consists of the social context within which people live, which includes social values and norms, cohesiveness or connectedness among neighbors and the resulting social capital, nature and types of diversity, degree of mutual trust, civic vitality and political empowerment, levels of safety and violence, and various features of the social organization of places. These physical and social environments do not exist independently, but are influenced by one another. For example, characteristics of the built environment such as the quality of public spaces can affect the nature of social interactions within the neighborhood, which in turn has consequences for the ability of neighbors to advocate for improved public spaces.[3]

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Underlying and contributing to the nature of

these physical and social environments and subsequently to neighborhood differentiation is the level of inequalities in social and economic resources across neighborhoods as well as residential segregation. Defined as the geographic separation of persons into residential areas based on race, ethnicity, or socioeconomic position, residential segregation leads to the inequitable distribution of social and economic resources, which in turn can contribute to further residential segregation.[3] The result is a concentration of persons with given racial/ethnic characteristics, such as African American, white, Hispanic, or Appalachian, or given levels of socioeconomic status, such as poor or wealthy, or a combination of the two, such as poor whites or wealthy whites, in certain neighborhoods. Consequently, persons with more resources and power are able to locate in and advocate for neighborhoods with better environmental attributes.[4] This has led to characterizing neighborhoods according to race/ethnicity or socioeconomic disadvantage or deprivation based on measures such as those used in this report.[5]

A neighborhood's environmental conditions can promote health or put health in jeopardy. The social and economic features of neighborhoods have been linked to mortality, perceived health status, disability, birth outcomes, chronic disease, health behaviors, mental health, injuries, violence, and a number of other disease risk factors and health outcomes.[6] Contaminants in the air, water, food, and soil and proximity to facilities that produce or store hazardous substances can cause a variety of adverse health effects, including cancer, birth defects, respiratory illness, and gastrointestinal ailments.[6-7] The built environment can influence lifestyle choices and positively or negatively impact not only physical health outcomes such as obesity, diabetes, and cardiovascular disease, but also psychological well-being and mental health conditions such as depression.[6-7] The array of values and norms of a society influence health behaviors and their associated health outcomes.[7] Social or community support can add resources to an individual's repertoire of strategies to cope with change and foster health or the lack of such support can lead to unhealthy behaviors, early onset of disease, and premature mortality. If present, social stability, recognition of diversity, safety, good working relationships, and cohesive communities can provide a supportive society that reduces or avoids many potential risks to good health, particularly depression and other mental health problems, violence-related trauma and homicides, and disease incidence and mortality, particularly cardiovascular disease.[7]

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Studies examining the relationship between neighborhood census characteristics, such as those examined in this report, and health outcomes have concluded that living in a poor, deprived, or socioeconomically disadvantaged neighborhood is generally associated with poor health outcomes including greater mortality, poorer self-reported health, adverse mental health outcomes, greater prevalence of chronic disease risk factors, greater incidence of diseases such as cardiovascular disease and diabetes, and adverse child health outcomes.[3] These results hold even after taking into consideration the individual characteristics of the neighborhood residents, such as race/ethnicity and socioeconomic status. One only needs to look at the data from the Cincinnati Health Disparities Report,[8] the Greater Cincinnati Northern Kentucky Community Health Status Survey,[9] and the Cincinnati Health Department Neighborhood Mortality Data Report[10] to attest to the applicability of these findings to the City of Cincinnati.

The Health Foundation of Greater Cincinnati's Greater Cincinnati Northern Kentucky Community Health Status Survey (GCNKCHSS) provides more specific examples of the relationship between neighborhood and census characteristics, and health. The GCNKCHSS has studied health in our neighborhoods, counties and region since 1997. This rich set of data

provides one of the most comprehensive over-time views of the health of a community in our nation.

As a regional dataset, the number of interviews in any one neighborhood is limited. However, in 2010 The Health Foundation conducted a number of interviews that allows us to draw conclusions about the City of Cincinnati as a whole, and about two City of Cincinnati neighborhoods: Avondale, a SES I neighborhood, and Price Hill, SES I and II. As chapter nine suggests, these neighborhoods experience struggles in the Bold Goal areas of Education and Income. The same is true in the area of Health.

One regional Bold Goal for Health is that by 2020, at least 70 percent of our community will report having excellent or very good health. Across our region, about half of residents say they currently experience excellent or very good health. That figure is lower (44% of residents) in the City of Cincinnati as a whole. Even fewer residents of Price Hill (41%) or Avondale (31%) report excellent or very good health than is the case in the region or the City. Health challenges for Avondale and Price Hill residents, and residents of other areas of the City, may also frequently result in reduced quality of life. Extended or chronic health problems lead to challenges with education and employment.

A second regional Bold Goal for Health is that by 2020 at least 95 percent of the community will report having a usual place to go for medical care (this is sometimes referred to as a "medical home"). Across our region, about 84 percent of residents currently have a usual place to go for medical care. However, fewer residents of Avondale (80%), the City of Cincinnati as a whole (79%) or Price Hill (77%) report they have a usual source of care. The lack of a usual source of care can be due to a variety of factors, including accessibility and cost. Good health and a usual source of care can be related: those who have a usual source of care are more likely to seek appropriate and timely healthcare when they need it.

The dataset from 2010 also shows that neighborhoods can have more unique characteristics of health. For example, while the percent of residents living in Price Hill, the City and region who report high blood pressure are similar, more residents of Avondale report having been told they have high blood pressure. And, while the percent of residents living in Avondale, the City and region who report heart trouble or angina are similar, more residents of Price Hill report having been told they have heart trouble.

While these few selected data points show there is variation in the health of Greater Cincinnati residents depending on whether they live in the region, the City or in a specific neighborhood, there is a lack of scientific consensus about what it is about neighborhoods that affects health. One argument is that the physical and social environments of neighborhoods, individually and interactively, create an environmental "riskscape" which affects health across the life course through a dynamic inter-

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play between stress and behavior moderated by one's genetic makeup and biological responses.[3] While acute stress can be beneficial and motivational, it can also lead to unhealthy coping behaviors such as overeating, smoking, heavy alcohol consumption, and excessive caffeine dependence, particularly when these behaviors are coupled with environmental factors. For example, consumption of high-fat foods may be more readily consumed if fast food restaurants are easily accessible in the neighborhood.[4] However, long-term exposure to psychosocial stressors in the environmental riskscape, such as persistent poverty, material deprivation, environmental hazards, lack of services, social disorganization, and other detrimental environmental conditions, may lead to chronic stress, which can weaken the body's defense system.[11] When faced with stressful situations, a person's body reacts biologically to that situation through its stress-response systems. This abil-

ity to respond to stress, known as allostasis, can become compromised when a person is exposed to stressful situations over prolonged periods of time during the entire life course. The cumulative physiological degradation of the stress-response systems over time, referred to as allostatic load, can lead to "wear and tear" on major organ systems, thus, increasing one's susceptibility to disease and premature mortality. Higher allostatic loads have been linked to socioeconomic status as well as a number of physical and mental health conditions in both adults and children, including hypertension, obesity, diabetes, cardiovascular disease, cognitive and physical impairment, autoimmune and inflammatory disorders, posttraumatic stress disorder, and mortality.[12] In particular, children living under adverse conditions, such as poverty, poor housing and neighborhood conditions, or homes with unresponsive or harsh parenting, may be even more susceptible to the effects of cumulative-risk exposure and allostatic load, putting them at greater risk for premature morbidity and mortality.[13]

However, it is not appropriate to commit the ecological fallacy of assuming that all persons living in, for example, a low socioeconomic neighborhood have or will have poor health. Positive health outcomes may result even in the presence of detrimental environmental exposures when other strengths or resiliencies are present in the riskscape or when the neighborhood conditions are modified by individual-level characteristics and behaviors. For example, some individuals may have genetic endowments and biological makeups that make them more vulnerable to adverse neighborhood conditions, while others may have the personal and financial resources that allow them to overcome deficiencies or hazards in their neighborhoods.[3] Also, some persons may have adopted healthy lifestyle behaviors, such as physical activity, healthy diets, proper sleep patterns, and relaxation techniques, or established social support networks to counteract the effects of environmental psychosocial stressors.

Given that a person's health and many of the underlying place-based determinants of that health strongly influence the person's well-being as well as contribution to society, the question is what can be done to improve the conditions under which the person lives. As Richard Couto stated in a forward to a book on the health and well-being of Appalachians[14], simply blaming individuals for having poor health due to some inherent shortcomings or crediting them for good health is inappropriate. The context of people's lives is an important determinant of their health and the riskscape posed by that context puts some at greater risk for illness and premature mortality than others. Justice requires the removal of the inequalities that contribute adversely to the health and well-being of people. While policies such as redistributing resources or reducing residential segregation to minimize the inequalities in social and material resources across neighborhoods or specifically targeting certain neighborhood-level features such as increasing the availability of healthy foods[2] sound appealing and would make substantial contributions to resolving the health disparities that exist across neighborhoods, often the political will to implement such broad-based policies is lacking. Other approaches which look beyond the individual without completely removing the individual from the solution must be considered. Not every neighborhood is identical. Neighborhoods vary in terms of a number of characteristics which can contribute to the health and well-being of their residents and, thus, interventions to change the riskscape must be locally-based.

Community-based participatory research is one effective means that neighborhoods can adopt to build on their local assets to address local health disparities. According to this approach, communities identify their health issues of concern and then systematically collect local data to better understand those issues so that practical intervention and prevention strategies can be developed and implemented.[15] When done right, community-based participatory research methods, such as those conducted and on-going in Lower Price Hill[15] and other Cincinnati neighborhoods,[16] can facilitate local neighborhood involvement in building the ca-

pacity to improve the health and well-being of its residents.

Although more work is required to fully understand the health disparities that exist across the neighborhoods in Cincinnati, the results of this report suggest where such disparities might exist. Research in other communities has clearly documented that neighborhoods with the lowest socioeconomic status have the greatest likelihood of poor health. Cincinnati is probably not an exception. Therefore, closer examination of the riskscape of those neighborhoods this report has identified as low socioeconomic neighborhoods is required. As stated by Kawachi and Berkman, "a critical key to meeting the health needs of individuals, their families, and their communities lies in improving the conditions they face in their neighborhoods, and an essential key to improving those conditions lies in learning how" (p. 346).[17]